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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/868,744	01/09/2002	Frank Schepers	Lettuce	6532
30279	7590	12/15/2004	EXAMINER	
DANA REWOLDT GARST SEED CO. 2369 330TH ST SLATER, IA 50244			MEHTA, ASHWIN D	
			ART UNIT	PAPER NUMBER
			1638	

DATE MAILED: 12/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/868,744

Applicant(s)

SCHEPERS ET AL.

Examiner

Ashwin Mehta

Art Unit

1638

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 September 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-14 and 16-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-14 and 16-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 January 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
2. The objections to claims 3-5, 10, 13, and 16 are withdrawn in light of the claim amendments.
3. The rejection of claims 1, 3-21 under 35 U.S.C. 112, 2nd paragraph is withdrawn, in light of the claim amendments.
4. The rejection of claims 1 and 3-21 under 35 U.S.C. 112, 1st paragraph is withdrawn in light of the claim amendments.
5. The rejection of claims 1-21 under 35 U.S.C. 112, 1st paragraph is withdrawn in light of the claim amendments.
6. The rejection of claim 16 under 35 U.S.C. 102(b) is withdrawn in light of the claim amendment.
7. The rejection of claims 1, 4-11, 13-15, 17, 18, and 21 under 35 U.S.C. 102(e) is withdrawn in light of the claim amendments.

Art Unit: 1638

8. The rejection of claims 1 and 4-21 under 35 U.S.C. 103(a) is withdrawn in light of the claim amendments.

Claim Objections

9. Claim 9 is objected to because of the following informalities: the claim should start with the article, "A". Also, in line 3, the second instance of the term, "said" should be removed. Appropriate correction is required.

Claim Rejections - 35 USC § 112

10. Claims 9-14 and 16-21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 9: the recitation, "a DNA construct including a DNA sequence" renders the claim indefinite. The method of parent claim 1 indicates that a plant is to be transformed with a DNA construct comprising a DNA sequence to express RNA under the control of the Arabidopsis thaliana ACT2 gene promoter. It is unclear whether the DNA construct and sequence mentioned in claim 9 is the same as that in claim 1, or in addition to it, since claim 9 recites "a DNA construct including a DNA sequence". It is suggested that the all of the text of claim 9 following the term "comprising" in line 4 be replaced with, --said DNA construct--.

Art Unit: 1638

In claims 10, 13, 14, and 17: the recitation, "A plant cell as claimed in claim 9" in claims 10, 13, and 14, and "cells claimed in claim 9" in claim 17 renders the claims indefinite. The claims attempt to limit the plant cell of claim 9. However, claim 9 is directed to a plant, not a plant cell.

Further in claim 14: the meaning of the recitation, "said DNA sequence expresses that inhibits the production of a homologous protein" is not clear.

In claim 16: the claim is indefinite because it is unclear whether the DNA sequence is the same as or in addition to that mentioned in claim 1. It is suggested that all of the text following the recitation, "the construct" in line 2 be replaced with, --said DNA sequence comprises a nucleotide sequence encoding GUS or oxalate oxidase, operably linked to said ACT2 promoter--.

Claim Rejections - 35 USC § 103

11. Claims 1, 3-14, and 16-21 remain rejected under 35 U.S.C. 103(a) as being unpatentable over Curtis et al. (J. Exp. Bot., 1994, Vol. 45, pages 1441-1449) or Grayburn et al. (Plant Cell Rep., 1995, Vol. 14, pages 285-289) in combination with An et al. (Plant J., 1996, Vol. 10, pages 1078-121), Hartman et al. (WO 92/14824), Bernasconi et al. (U.S. Patent No. 5,633,437), and Bidney et al. (U.S. Patent No. 6,084,164), for the reasons of record stated in the Office action mailed March 23, 2004. Applicants traverse the rejection in the paper filed September 9, 2004. Applicants' arguments have been fully considered but were not found persuasive.

Applicants first address a "Scott and Vick article" (response, page 4, 2nd full paragraph). However, no such article was cited in the rejection. Applicants argue that Curtis et al. make clear that some R1 seedlings were NPTII positive and some also were GUS positive, but that

Art Unit: 1638

other plants failed to express GUS even though it was detected by Southern hybridization, and that there is no teaching that the claimed invention would be useful (response, paragraph bridging pages 4-5). It appears that Applicants were attempting to show a relation to the Scott and Vick article, which, Applicants allege, presented an instance of gene silencing in the T1 generation of transgenic sunflower plants (response, page 4, 2nd full paragraph). However, the claims do not encompass preventing gene silencing, if that is what Applicants are referring to. See *In re Lindner*, 173 USPQ 356 (CCPA 1972) and *In re Grasselli*, 218 USPQ 769 (Fed. Cir. 1983) which teach that the evidence of nonobviousness should be commensurate with the scope of the claims. Applicants argue that in Bidney et al., the promoter used to express the antisense stearyl-ACP desaturase gene was the Brassica napin gene promoter, that the CaMV 35S promoter was used to express the NPTII gene, and that col. 6 indicates that preferred promoters are seed-specific promoters, that the actin 2 promoter is not in the list or used, and that the patent directs one to use promoters active in embryogenic and oil biosynthesis (response, page 5, 1st full paragraph). However, Bidney et al. do not direct one of ordinary skill in the art to ONLY use seed-specific, embryo-specific, or oil biosynthesis gene promoters. Column 6, line 28 states that the promoter can be constitutive. Further, the claims of Bidney et al. do not limit the promoter to being only seed-specific, embryo-specific, or from an oil biosynthesis gene. Applicants argue that there is no indication in Bidney et al. of what number of T2, T3, T4, etc. plants were evidencing gene expression (response, page 5, 1st full paragraph). However, again, Applicants argument is not commensurate in scope with the instant claims.

Applicants next argue that Bernasconi et al. (the '437 patent) do not teach use of the actin 2 promoter and that sunflower is not shown as transformed (response, page 5, 1st full paragraph).

Art Unit: 1638

However, this reference was cited to address the claims limiting the expressed DNA sequence to be one that confers herbicide resistance, and Bernasconi et al. do teach an herbicide resistance gene. The claims of '437 do encompass transgenic plants expressing an ALS enzyme, and which are resistant to ALS inhibition by an ALS herbicide.

Applicants next argue the deficiencies of Barbour et al. (response, paragraph bridging pages 5-6). However, this reference was not cited in this rejection. Further, Applicants' arguments against Curtis et al., Bidney et al., and Bernasconi et al. are directed to the references individually, not in the combination presented in the rejection. One cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

The rejection is maintained.

Summary

11. Claims 1, 3-14, and 16-21 remain rejected.
12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after

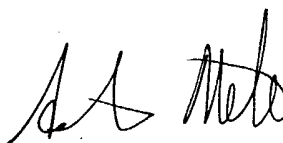
Art Unit: 1638

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Contact Information

Any inquiry concerning this or earlier communications from the Examiner should be directed to Ashwin Mehta, whose telephone number is 571-272-0803. The Examiner can normally be reached from 8:00 A.M to 5:30 P.M. If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Amy Nelson, can be reached at 571-272-0804. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9306 for regular communications and 703-872-9307 for After Final communications. Patent applicants with problems or questions regarding electronic images that can be viewed in the Patent Application Information Retrieval system (PAIR) can now contact the USPTO's Patent Electronic Business Center (Patent EBC) for assistance. Representatives are available to answer your questions daily from 6 am to midnight (EST). The toll free number is (866) 217-9197. When calling please have your application serial or patent number, the type of document you are having an image problem with, the number of pages and the specific nature of the problem. The Patent Electronic Business Center will notify applicants of the resolution of the problem within 5-7 business days. Applicants can also check PAIR to confirm that the problem has been corrected. The USPTO's Patent Electronic Business Center is a complete service center supporting all patent business on the Internet. The USPTO's PAIR system provides Internet-based access to patent application status and history information. It also enables applicants to view the scanned images of their own application file folder(s) as well as general patent information available to the public. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>.

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Ashwin D. Mehta, Ph.D.
Primary Examiner
Art Unit 1638

December 1, 2004